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AN ANALYSIS OF WILDERNESS TRAINING AND A STRATEGIC PLAN TO HELP MEET WILDERNESS TRAINING NEEDS

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CLEMSON CLASS OF 1989

APRIL, 1990

This paper was prepared as a student project in partial fulfillment of the Professional Development for Outdoor Recreation Management Program at Clemson University. It in no way reflects USDA Forest Service policy nor are the opinions expressed those of anyone other than the author.

ABSTRACT

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TITLE: An Analysis of Wilderness Training and a Strategic Plan to Help Meet Wilderness Training Needs

ABSTRACT: An heightened interest in wilderness management has sharpened the focus on the various components of management including wilderness related training. The Ninemile Wildlands Training Center was chartered in 1989 to fulfill training needs for agency employees. The curriculum has expanded from 6 to 18 courses in one year and additional expansion is planned.

A strategic plan for the Ninemile Wildlands Training Center charts a course for future expansion. Existing wilderness training was analyzed to determine target markets, distribution systems, demand and availability of courses, course settings, scope of training and quality and availability of instructors.

Based on an assessment of internal and external strengths and opportunities as well as barriers and threats, the strategic plan outlines how the Ninemile Wildlands Training Center can forge into a leadership position with providing wilderness training.

KEYWORDS: Wilderness, wilderness training, strategic plan

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Survey to assess training needs

Ninemile course catalog

EXECUTIVE SUMMARY

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SUMMARY: One important aspect of wilderness management is ensuring that wilderness managers have the knowledge, skills, and abilities to manage this unique and precious resource. As the focus on wilderness management sharpens with renewed public, Congressional, and agency interest, training stands to serve a vital role by helping managers prepare to meet the wilderness management challenge.

In recognition of the need to sharpen the wildland management skills of employees, the Ninemile Ranger District, Lolo National Forest chartered the Ninemile Wildlands Training Center. The training center curriculum expanded from 6 courses in 1989 to 18 courses in 1990. To chart a course for future growth and development as a training center, a strategic plan is appropriate.

Understanding the external and internal environment is a crucial part of developing a strategic plan. To help understand the environment in which we operate, wilderness training across

the country was analyzed to determine what courses are currently offered, target audiences, distribution of courses, setting for training courses, instructors, scope of training and need for additional courses.

The analysis revealed the need to improve wilderness training for employees. Wilderness training, as Congressman Bruce Vento described it, is often on a hit or miss basis. Availability of training is highly variable between regions and several different approaches to training are used. Coordination between regions concerning course development and sharing courses and instructors is limited, but growing. Although there are many emerging issues or management challenges, leadership with developing training courses to respond to these is limited. Although the strong decentralized nature of the agency and the diversity of the wilderness system presents barriers to national training centers, the current environment provides opportunities for national leadership.

A strategic plan outlining the mission and objectives for the training center and a strategy to meet these objectives is presented. Based on the assessment of existing training and an analysis of opportunities and barriers, a strategy to fulfill a role as a National Training Center for wilderness skills is proposed. This involves developing new courses, expanding the offering of courses to other regions, and serving as a clearinghouse for wilderness instructors across the nation. The strategy involves seeking partnerships to help finance a full time position dedicated to achieving these goals. An alternate strategy as well as operational recommendations for both strategies is presented.

INTRODUCTION

One important aspect of wilderness management is ensuring that wilderness managers have the knowledge, skills, and abilities to manage this unique and precious resource. As the focus on wilderness management sharpens with renewed public, Congressional and agency interest, training stands to serve a vital role by helping managers prepare to meet the wilderness management challenge.

"We cannot protect these irreplaceable areas simply by leaving them alone....Management is our hope for the future, our hope for leaving wilderness unimpaired for future use and enjoyment as wilderness."

Jim Overbay, Deputy Chief for National Forest Systems

In recognition of the need to sharpen the wildland management skills of Forest Service as well as other agency employees, the Ninemile Ranger District, Lolo National Forest, chartered the Ninemile Wildlands Training Center (NWTC). The NWTC carries on a long tradition of wildlands training at Ninemile. Training packers was one of the original missions of the Ninemile Remount Depot, established in 1930 to provide packers and packtrains of mules for backcountry firefighting and work projects. The tradition was renewed with the inception of the popular Horsemanship and Packing clinic in 1979.



Packer Bill Bell, right demonstrates techniques at Remount Depot, 1941.

The NWTC is evolving rapidly as evidenced by the expansion of courses from 6 in 1989 to 18 in 1990. The early emphasis on "hands-on" skills courses remains but the scope of courses has broadened to include advanced management. Ninemile will host the Advanced Wilderness Management Training for Line Officers in May of 1990. Courses developed at NWTC are now exported to other Regions and Forests.

A goal of the NWTC is to continue to develop and expand its role as a continuing education center for wildland management expertise. The heightened interest in wilderness management has implications for wilderness training as discussed throughout this paper. What are the implications for the NWTC? Are there opportunities to continue to grow and develop as a center of excellence? How can we best meet the needs of the people we serve?

To answer these questions and to chart a future course for the NWTC, a strategic plan is appropriate. The strategic plan consists of (a) mission or purpose; (b) long term objectives; (c) overall strategy for achieving its objectives and fulfilling its mission (Syme et al, 1989). The strategic plan evolves from an analysis of the organizations internal capabilities and future external environment. The strategic plan serves as a basis for development of a marketing plan that details how we will meet the desired goals and objectives. This paper will serve as the strategic plan for the NWTC.

Specific objectives of this paper are:

- 1) Assess the need for wilderness training at the National level;
- 2) Analyze existing wilderness training to determine availability, need for new courses, target markets, demand for existing courses, distribution of courses, and setting for wilderness training.

3) Based on the above assessment, develop a strategic plan for the Ninemile Wildlands Training Center.

THE NEED FOR WILDERNESS TRAINING

Why is wilderness related training important? What is unique or different about wilderness that requires a distinct training program?

Understanding the importance and relevance of wilderness training provides the foundation for development of a wilderness training program. Unless we can demonstrate a compelling need and a strong purpose, support will be slow to materialize. This section summarizes the purpose and need for wilderness training.

Prior to focusing on the need for wilderness training, let's examine the benefits of training in general. Tom Peters in his book "Thriving on Chaos" summarizes the importance of training:

- Invest in human capital as much as in hardware.
- Train entry level people and retrain them as necessary.
- Train everyone in problem solving techniques to contribute to quality improvement.
- Train extensively following promotion to the first managerial job; then train managers every time they advance.

- Use training as a vehicle for instilling a strategic thrust.
- Insure that all training be line driven-radically so; all programs should consist primarily of input from line, be piloted in several line locations, and be taught substantially by line people.

"Consider doubling or tripling your training budget in the course of the next, 24 to 36 months. Less serious consideration means a failure to come to grips with both the nature of the problem and the magnitude of the opportunity."

CONGRESSIONAL TESTIMONY

Testimony from the 1988 Congressional Oversight Hearing before the Subcommittee on Public Lands on Forest Service wilderness management addressed the need for wilderness training:

"Almost all witnesses agreed that the National Forest wilderness system is deteriorating and that Forest Service wilderness management has been weak and inadequate.

Other resource programs such as timber, range, minerals, recreation, and wildlife have full time employees, career ladders and impressive training programs. Wilderness management training is on a hit or miss basis."

Congressman Bruce Vento, MN,

"We need to train all Forest Service people not just those involved in wilderness"

Bill Worf, Wilderness Watch

"Wilderness values are entirely different from multiple use. We are looking at protecting a process here and not producing a product, in essence, a guardian and not a gardener- that is, not a manipulator of the environment. Formal training in most universities do not prepare managers for this role.

Wilderness is a unique output or value of public lands- different from other multiple uses of the land including outdoor recreation. The provision of outdoor recreation does not require natural systems, solitude, primitive opportunities and unconfined recreation opportunities. Wilderness requires all of them."

Associate Professor Roggenbuck, VPI & SU

"Training of wilderness managers is a high priority need. The expansion of the wilderness system has thrust many new managers into the field with little or no wilderness management experience or training."

Research Scientist

"The first concern is more district and regional wilderness training. Wilderness and non-wilderness employees both need to be trained as non-wilderness employees sometimes don't have a good ethic...."

Greg Hansen, Wilderness Ranger, Tonto National Forest

SPECIAL MANAGEMENT NEEDS

Although the wilderness allocation issue remains important, the focus of many public interest groups, concerned citizens and agency personnel is shifting to wilderness management.

"When the Wilderness Act was passed, many assumed that simply designating an area as wilderness would assure its preservation. However, experience has shown us that preserving these beautiful, untamed lands requires a lasting commitment and cooperation from the public.

"President George Bush, Proclamation for National Wilderness Week, August 17, 1989.



The Chinese wall, Bob Marshall Wilderness, Montana

Management of wilderness requires an understanding and appreciation of its legal, social, philosophical, and ecological foundation.

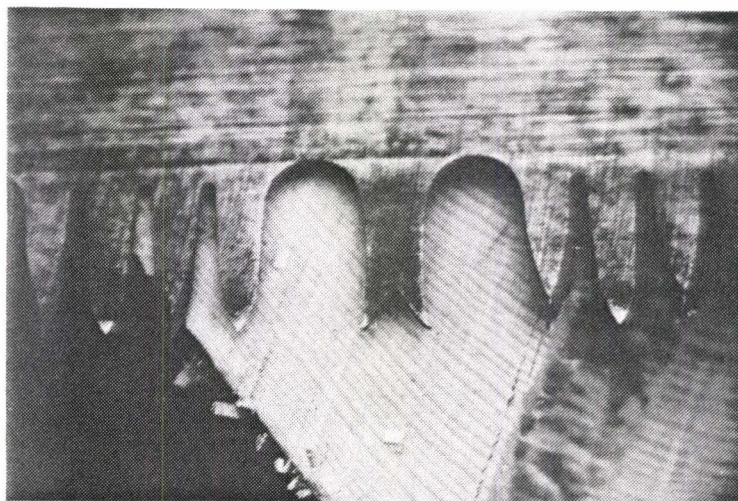
- The Wilderness Act of 1964 includes special provisions for management. Knowledge and awareness of the Act and its implications for management is crucial.

- **"Wilderness is a composite resource with inseparable parts, and the central focus of management must be on interrelationship of the whole, not its component parts."**

Wilderness Training Task Force, 1990

Training can help expand our focus to encompass an integrated ecosystem approach looking at all resources, not just recreation.

- Training can help focus on the multiple values of wilderness as expressed by Roderick Nash, including scientific, spiritual, aesthetic, heritage, psychological, cultural, and intrinsic values. (Nash, 1988)
- Wilderness requires the use of primitive skills for work and travel. Skills once common with our forefathers such as packing a mule or building a bridge may be lost unless passed on to new generations of managers.



- Training can help us respond to emerging issues such as monitoring of wilderness..
- The value of wilderness will grow as our world rapidly develops. Unless we are leaders with management of this resource, we may lose the privilege of serving as wilderness stewards..

"I feel the time is at hand to establish a new Federal agency, the US Wilderness Service."

Michael Frome, from Congressional testimony at Oversight Hearing

Potential consequences of not having a highly skilled wilderness work force will be continued discussion of a US Wilderness Service, continued criticism of Forest Service wilderness management such as the 1989 GAO report, and continued degradation of wilderness.

Training can help us retain our leadership position with wilderness management.

ANALYSIS OF WILDERNESS TRAINING

Understanding the external and internal environment is a crucial part of developing a strategic plan. To help understand the environment in which we operate, wilderness training across the country was analyzed to help answer the following questions:

- Who are our target audiences? Typically, each target audience has distinct needs and may require different types of training to meet that need. For example, training for a District Ranger may be different than training for the trail crew or a wildlife biologist.

- What courses are currently offered and who do they serve?
- What new courses are needed to respond to emerging issues and to improve management?
- Given the geographic dispersion of Forest Service units and the diversity of issues, what is the best way to deliver training to employees?
- What are the qualifications of instructors and how many instructors are available? Do individual regions have the necessary number of qualified instructors to provide high quality, consistent courses?
- In what setting does wilderness training take place?
- What is the appropriate scope of wilderness training-local, regional or national?
- How can we most effectively train wilderness managers given our decentralized agency and limited dollars? Can we afford to have each Region or Forest develop their own training programs or are there opportunities to share curriculums, instructors, and courses? Are there opportunities to develop partnerships with other agencies or interest groups to help share in cost?

The answer to these questions will help formulate a strategic plan for the NWTC.

AVAILABILITY OF TRAINING

The 1989 General Accounting Office report on wilderness preservation queried wilderness managers on the availability of wilderness training (GAO, 1989):

"As of September 30, 1988, to what extent were each of the following means of training in wilderness management available to district wilderness staff?"

METHOD	VERY GREAT EXTENT	GREAT EXTENT	MODERATE EXTENT	SOME EXTENT	LITTLE OR NO EXTENT
On the job training	17.2%	26.9%	23.3%	20.9%	10.7%
Formal Forest Service Training	0.2%	12.2%	31.1%	35.2%	20.0%
External training from other agencies or academia	1.3%	4.4%	11.9%	25.7%	50.9%

Note that over 55% of those queried felt that Forest Service wilderness training was available to some or little or no extent. The figure increases to 86% with the addition of the moderate extent category. External training is obviously not filling the gap as almost 89% of those queried felt that this training was available to a moderate extent or less. Obviously, on the job training is most prevalent. This type of training is least expensive but also the least consistent and highly dependent upon the skills and abilities locally available.

WHO ARE OUR TARGET AUDIENCES?

Various levels of the organization have differing needs in terms of training. To best meet the needs of our employees, we must understand their needs. The Southeastern Region of the US Forest Service identified three target groups or levels of training for wilderness:

1. Awareness level- the target audience includes all Forest Service personnel. The goal is to increase awareness and understanding of wilderness with all employees.

2. Understanding and working level- the target audience includes resource assistants, district rangers and key technicians. The goal of training is to ensure these people have the necessary knowledge and skills to manage a wilderness area.

3. Professional level- the target audience is wilderness managers from the Forest Service, National Park Service and the Fish and Wildlife Service as well as interest groups such as the Wilderness Society, Sierra Club, wilderness researchers, and interested citizens. A symposium is envisioned where research and creative management solutions are discussed.

At the understanding and working level, there may be a distinction for hands on primitive skill training necessary for backcountry use versus management training. For management training, there may be differing needs for on the ground managers versus upper management such as Forest Supervisors. Additional segmentation particularly at that level may be appropriate if we are to develop a curriculum responsive to employee needs.

To help sort out this question, existing wilderness training was analyzed to determine target audiences for the various courses offered.

NUMBER OF COURSES OFFERED FOR PRIMARY TARGET AUDIENCES

ALL EMPLOY- EES	FIELD CREWS	MANAGERS	ADV. MANAGE- MENT	MIXED
0	25	9	2	5

NOTE: There obviously is some overlap in who attends the various courses but the above represents who the primary target audience is. The mixed category is for courses where there is no distinct primary audience.

After reviewing existing course offerings and target audiences and considering the organization in terms of work roles, the Southeastern Region Approach is recommended with additional segmentation at the understanding and working level. Design courses with the following audiences in mind:

- Field crews and wilderness rangers with a need for good on the ground skills with people, tools, techniques and a firm grasp and understanding of wilderness principles and philosophy.
- First line managers including resource assistants, District Rangers, key staff and people directly involved with management of wilderness. This audience has less need for "hands on skills" and more need for management courses relating to developing, implementing, and monitoring wilderness plans.
- Upper level management including Forest Supervisors, Regional Foresters and key staff from the Regional and Washington office.

As an active interchange between various levels of the organization is crucial, cross sections of the organization should be encouraged to attend all sessions. Nonetheless, course design must take into account the distinct needs of each of these segments.



ASSESSMENT OF CURRENT WILDERNESS TRAINING COURSES

What courses are currently being offered and do they meet the needs of the target audiences? What opportunities are available to customize a training "package" to meet the needs of different groups? Courses were segregated as to their primary focus: primitive skill training or management training. The distinction is not always clear, particularly with the workshop training approach.

CONTENT SUMMARY OF WILDERNESS TRAINING COURSES OFFERED

TYPE	MAJOR TOPIC	# OF COURSES	LOCATION
PRIMITIVE SKILLS	Minimum impact camping	1	R1,
	Horsemanship and Packing	4	R1,R2,
	Trail maintenance	4	R1,R4,R5
	Bridge construction	3	R1,R5,NPS
	Use and care of primitive tools	1	R1
	Understanding llamas	1	R1
	Wilderness ranger workshops	5	R2,R5,R6
	Wilderness work skills	6	R2,R3,R5,R6,R8,R9
	Site revegetation workshops	2	R5, NPS
MANAGEMENT	Wilderness Planning/LAC	3	R5, BLM
	Working with Outfitters	1	R1
	Natural Fire Management	1	R1
	Trail Planning	1	R1
	Correspondence course	1	CSU
	Workshops and conferences	6	R1,R2,BLM,
	Wilderness management schools	2	R3, NPS

NOTE: Location refers to Forest Service Regions; NPS = National Park Service; BLM = Bureau of Land Management; CSU = Colorado State University.

This chart includes formal training courses and does not include orientations or local workshops held for many wilderness complexes. Primitive skills courses fall into two categories: specialized courses like horse-manship and packing, minimum impact camping, and bridge construction, and the workshop approach

where a wide range of topics is covered. For example, the wilderness work skills workshop may cover the same topics as the specialized courses, but typically not to the same extent.

Wilderness training courses are further summarized in Appendix A.

DEMAND FOR EXISTING COURSES

Assessing the demand for current courses will help develop a curriculum responsive to employee needs. If more people consistently sign up for courses than there are slots for the course, expansion or addition of another course may be appropriate. A good example is the Horsemanship and Packing class offered at the NWTC. Based on demand, an additional course was added to the curriculum in 1990.



Horsemanship and packing clinic, NWTC

Conversely, if fewer people sign up for a course than there are slots available, an assessment of whether this course meets employees needs is necessary. The topic may be important but perhaps there is another way to package it. For example, the Understanding Llamas course has drawn little interest, yet llamas are an issue in some areas. Packaging this into a module of a wilderness workshop may be appropriate. Other factors can influence demand such as location, cost, timing, employee workload, promotional efforts, etc.

The Trailshot program in Region 5 received inquiries from 10 western National Forests, three National Parks, and the general public. The attendance at the 1989 Enduring Wilderness Resource Conference in Minneapolis exceeded 600 people. Over 110 people applied for the 45 slots available for the Advanced Wilderness Management Training for Line Officers scheduled in May of 1990 at Ninemile. The annual Horsemanship and Packing Clinic at Ninemile is booked every year; in 1989, over 40 people attended the course designed for 25 people. The Region 3 Wilderness Management School consistently fills the 25 slots available for this class. The Region will offer the course every other year. 50% of the most recent class was filled with BLM and National Park Service employees.

Here is a sample of the demand for some wilderness training courses:

COURSE	# OF APPLICANTS	# OF SLOTS AVAIL.
Advanced Wilderness Mgmt for Line Officers	110	50
R6 Wilderness Ranger Workshop	125-150	
Forest Service and Outfitters Working together	42	35
Prescribed Natural Fire management	60	30
Horsemanship for Managers	10	15
Horsemanship and Packing Clinic	40	25
Crosscut saw maintenance	5	8
CSU Management of Wilderness Correspondence 1985-1989	128	

A continual assessment of the demand for courses will help tailor a curriculum responsive to the needs of our employees. This information can help answer questions relating to the frequency of course offerings, the packaging of courses, and the need for new or additional courses.

WHAT NEW COURSES ARE NEEDED TO RESPOND TO EMERGING ISSUES AND MANAGEMENT NEEDS?

The earlier discussion of purpose and need for wilderness training surfaced several issues that suggest topics for additional courses:

Issue: Lack of knowledge or understanding of wilderness internally, particularly amongst employees who do not have direct wilderness responsibilities. This lack of understanding can occasionally lead to conflict or a lack of support for the wilderness system.

Recommendation: Develop a 1 day course designed to increase awareness and understanding of wilderness for all employees.

Issue: One of our primary responsibilities is to increase public awareness of wilderness values and how to care for this resource.

"Educating visitors was probably the most widespread recommendation among the witnesses. It was widely recognized that visitor education was the most effective long term solution to control many of the environmental damages occurring in wilderness."

Congressman Bruce Vento, MN, from summary of Wilderness Oversight Hearings

Many creative efforts are underway and many ideas have been consolidated into a reference book "Ideas for Wilderness Information and Education."

Recommendation: A similar training course is appropriate to assist in developing and implementing a wilderness education and information plan for specific areas.

Issue: Awareness and understanding of wilderness and its management is critical for upper management as they essentially develop the policies, budgets and priorities for wilderness management. The Advanced Wilderness Management Course for Line Officers is planned for 1990 at Ninemile.

Recommendation: Continue to offer this course and offer a similar course for District Rangers and key Forest staff directly involved with wilderness management.

Issue: A primary recommendation to the Secretary of Agriculture in the 1989 GAO report on Wilderness Preservation was to develop baseline inventory information on the condition of each designated wilderness and monitor changes in and extent of use in wilderness areas. Without such information, questions arise as to whether we are meeting the intent of the Wilderness act and what is the trend in specific areas. Limits of Acceptable Change training currently provides a framework for this type of monitoring but its application is not widespread. Is there a need for monitoring training that focuses on techniques and their application?

Recommendation: Develop a course focusing on monitoring with appropriate linkage to wilderness planning concepts such as limits of acceptable change.

Issue: Wilderness management often focuses on recreation. However, the concept of wilderness goes far beyond recreation and embraces a total ecosystem with a diverse and complex array of resources. Understanding the ecological underpinnings in relation to wilderness preservation is crucial. Fire history, predator prey relationships, water quality, fisheries, recreation use, soils and plants all interact to create the wilderness ecosystem. Understanding the relationships very important for managers as they develop management plans.

Recommendation: Develop a course on Wilderness ecology designed to increase understanding of interrelationship of all resources in a wilderness and how they can be managed to meet the objectives of the Wilderness Act.

Issue: Management of Wild and Scenic rivers is growing in importance due to increasing visitor use and expansion of the Wild and Scenic River system. Like wilderness, wild and scenic river management is governed by special regulations.

Recommendation: Develop a course on Wild and Scenic River management using the nearby Alberton Gorge on the Clark Fork river as a demonstration area.

Issue: Wilderness and cultural resources sometime come into conflict. Examples include cabins within wilderness, remnants of settlement, and mining.

Recommendation: Develop a workshop on management of cultural resources in wilderness focusing on specific case studies.

HOW SHOULD WILDERNESS TRAINING BE DISTRIBUTED?

How is the training distributed to employees? Wilderness is dispersed across the Nation with 354 wildernesses located on 90% of the National Forests. As with many Forest Service programs, this geographic dispersion creates real challenges in terms of delivering consistent, quality training.

Several training delivery systems were evaluated by the Forest Service (Williams and Haas 1989) considering such issues as cost efficiency, effectiveness at both the Ranger District and Forest level, and capable of reaching a large, geographically dispersed audience:

Technical assistance model- similar to the Extension Service where staff is dispersed but linked with university faculty for support. Training sponsored by functional staff at the Regional or Forest level will serve as examples of this model. Wilderness workshops are examples of this approach.

Learning Resource Center- students come to training centers across the country. A good example of this is the Ninemile Wildlands Training Center or the Marana Training center.

Geographic Dispersal model- instructors move from location to location to serve students. The courses offered by the Student Conservation Association are a good example of this model.

Open University model- the campus is brought to the student rather than the student to the campus. An example is the Colorado State University correspondence course.

As evidenced by the GAO survey on availability of training, on the job training is currently the most relied upon method of training at this time.

DISTRIBUTION SYSTEM EMPLOYED FOR TRAINING

GEOGRAPHIC DISPERSAL	LEARNING RE- SOURCE CENTER	CORRESPONDENCE	WORKSHOPS
15	14	1	11

There are advantages and disadvantages of each model. The cost of training includes such factors as travel and per diem, tuition, and course development. A Forest Service assessment found for each \$1 spent on developing and operating a correspondence study course, the equivalent training at an on-site location would cost approximately \$8 (Williams and Hass 1989). Correspondence courses cost less due to less travel and per diem, donated study completed at home, the standard courses are valid across the Nation, and less instructors are required.

The correspondence course lays a foundation for wilderness management for individual employees and is an important component in the wilderness training equation. However, correspondence courses do not meet the following needs:

- The loss of networking opportunities with students and instructors and the synergistic effect that can occur when a diverse group of people meet in a stimulating environment.
- This method also falls short when it comes to hands on skills training and training best conducted in a wildland environment.
- National courses may not be as responsive to local issues and needs; opportunities to use the course as a problem solving forum are limited.

- Many employees do not have time or are not inclined to take a correspondence course, particularly upper management.

The Learning Resource Center model can be costly because of the increased travel and per diem required. The cost increases in proportion to travel distance from the center. With our dispersed workforce, this becomes a problem although Marana functions well in this capacity by offering nationally significant courses typically targeted towards mid to upper level management. Reaching field crews and district staff outside a geographic area may be a problem due to limited training budgets. Although the NWTC has attracted students from Regions 2,4,5,6 and 9, the majority of the students for primitive skills courses are from Region 1. A limited travel and training budget appears to be less of a problem for mid to upper level management.

A learning resource center can typically attract top-flight instructors and can serve as a center of excellence in a given field offering high quality, consistent training. The setting can be conducive to the type of training offered, and on site lodging encourages networking and camaraderie. The center typically has access to facilities and settings to demonstrate and teach appropriate technology. Once established, the centers are efficient in terms of the process of service assembly including coordination, scheduling, running a smooth operation.

The geographic dispersal model is an efficient way to bring high quality instruction to where the students are. The NWTC is currently exporting the Horsemanship and Packing Clinic to other Regions, and the Student Conservation Association's 10 courses follow this approach. Advantages include less travel and per diem expenses overall, ability to complete a project as part of the training exercise, consistent courses with high quality instructors, and the ability of students and instructors to network. Disadvantages include maintaining a pool of qualified instructors willing to travel, and coordination of logistics at the training location.

Workshops are popular at both the field/primitive skill level and at the management level. Workshops provide an excellent forum for discussion of a wide range of topics pertinent to the local as well as the National issues. As many important topics do not merit an individual course, packaging them into a workshop is an effective way to ensure that people have the necessary exposure to the subject. Workshops can tend to be "quasi" training because you cover a wide range of topics but not to the depth associated with formal training where a new skill or technique is learned. They also can serve as refreshers for previous training courses.

Workshops seem particularly appropriate at the wilderness ranger level where you can integrate philosophy with the array of field oriented skills necessary to manage their particular area.

The geographic dispersion of wilderness, the diversity of issues, a limited training budget combined with a strongly decentralized agency presents real obstacles in terms of a National Training Center. However, much of our wilderness system has similar issues and the concept of each Region or wilderness complex developing their own training is not cost efficient.

To meet the diverse training needs, an array of distribution systems seems appropriate. The Colorado State Correspondence course can continue to provide the foundation of knowledge for wilderness managers. Regional Training Centers such as Ninemile, Region 3 Wilderness School, and the Trailshots program in R5 can continue to meet regional needs. Programs like the Student Conservation Association where instructors are brought to the student continue to fulfill an important need. Regional and wilderness complex workshops are important forums to cover an array of current issues. Growth of the NWTC, particularly in the primitive skills area, will require exporting courses to where the students are.

WHAT IS THE APPROPRIATE SETTING FOR WILDERNESS TRAINING?

The location where wilderness training takes place is an important factor to consider. The emotional, spiritual and psychological dimension of wilderness is very important (Nash, 1988) (Spray and Weingart, 1988). Consequently, the setting where wilderness training is provided may influence individual perceptions, personal growth, and emotional responses. Expectations and judgements about the training are influenced by the training environment. The service is more likely to be successful if employees are provided with surroundings that trigger positive reactions. The physical environment must not only fit and be appropriate for the service, it must totally support the image of that service (Symes, 1987).

Settings identified include training within wilderness, training in front country settings, rustic or rural settings, conference room settings, and at home. Front country settings refer to camps set up in a wildland settings outside wilderness. Rustic settings refer to Ranger Stations or lodges adjacent to wildlands but well removed from the urban conference type setting. The distinction between settings is not always clear as training can be held in a conference room with field trips to wilderness or wildlands. The summary below focuses on the primary setting for the courses offered across the nation:

SETTING FOR WILDERNESS TRAINING

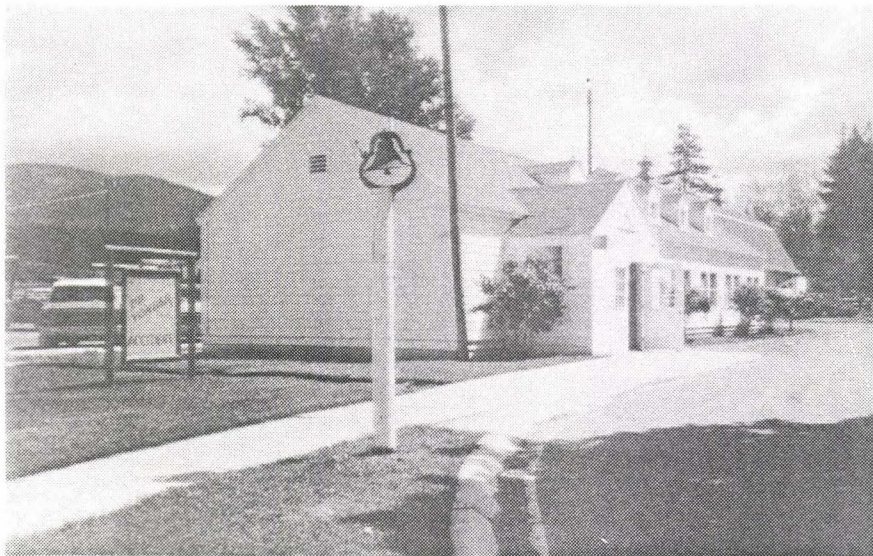
CONFERENCE ROOM	RUSTIC/RURAL	FRONT COUNTRY	WILDERNESS
6	14	16	3

The advantages of training within a wilderness environment include improved understanding and comprehension as concepts take on real meaning; personal growth from the physical and mental challenge, opportunity for hands-on skills training; and better exposure to the emotional or spiritual aspect of wilderness.

(Spray & Weingart, 1988). The primary disadvantage relates to effects of large groups within the wilderness environment. Most Forests discourage large groups within wilderness.

Conference or classroom settings are convenient and typically equipped to handle large groups with special needs such as audio visual equipment. Services such as lodging, meals and transportation are readily available. Logistical problems, agendas, preparation time for instructors as well as students is simplified. The advantages outlined for training within a wilderness listed above are disadvantages for this method.

Training in front country or rustic/rural settings can combine elements from both conference room and a wilderness setting without the major disadvantages of both these formats. Group size becomes less of an issue, demonstration of techniques is easier, and the setting can be a stimulating environment for learning.



The Ninemile Visitor Center and Wildlands Training Center Classroom

AVAILABILITY AND QUALITY OF INSTRUCTORS

With a people-based service such as training, the quality of the service rendered is inseparable from the quality of the service provided (Symes, 1987). Consequently, the quality of the instructors is a key determinant of the success of a training program. The quality of the course offered in a large measure depends upon the quality of the instructor. Good instructors are a resource that should be shared between regions to increase the effectiveness of training and to improve technology transfer.

Good instructors are currently in demand as evidenced by our experience at Ninemile with Smoke Elser. From teaching one course on horsemanship and packing in 1987, Smoke is now involved with 7 courses in 1990, and demand for his time is expected to increase. Future growth of the Student Conservation Association training program is hindered in part by a lack of qualified instructors. Availability of Forest Service instructors is an issue as time spent training results in less time for their regular job.



Smoke Elser, instructor at horsemanship and packing clinic

In recognition that many specialized skills are held by a few people, Region 6 initiated a Master Performer program about 8 years ago. Rather than add centralized specialist services to the Regional Office, district and forest staff with specialized skills were identified as consultants available to help other units. The Region accepts nominations from applicants and selects the top performers. They are then funded by the Regional Office to cover their anticipated consulting time. This funding helps overcome availability barriers from the master performers home unit. The program has been highly successful based on critiques provided by the receiving units (Pers comm. Joe Higgins, R6).

An opportunity exists to develop a master list of wilderness instructors for wilderness training courses across the country. To qualify for such a list, an individual must be recognized as a leader with technical or management skills as well as people related skills associated with good instructors. The overall quality of training will improve if we can depend upon the best instructors available to teach courses. A master list will help reach this goal. A clearinghouse for instructors may also create efficiencies with contracting of services and scheduling of instructors.

Recognizing the importance of on the job training and the barriers created by the geographic dispersion of wilderness, the NWTC can focus on training instructors from other regions and prepare them to pass on their skills at their home unit.

WHAT IS THE APPROPRIATE SCOPE OF TRAINING FOR WILDERNESS?

The scope of training refers to whether courses are targeted for the National, Regional, or Forest or wilderness complex level. Courses targeted for the National level typically must be more general in nature whereas courses at the Regional or Forest level can focus on more specific issues or needs relevant to that area. With

National and Regional courses, imparting a strategic thrust or agency direction is easier and more consistent than training at the Forest or complex level.

Training at the National level consists of the Colorado State University Wilderness Correspondence course, the Advanced Wilderness Management course for line officers scheduled at Ninemile this year, and the Wilderness Conference in Minneapolis in 1989. Courses offered by the Student Conservation Association may be considered National in scope as they offer standard primitive skill courses to National Forests and Parks across the Nation.

Most training originates at the Forest or Region level. The Southwestern Region relies on a Wilderness school offered annually that rotates between 3 locations. The Northern Region relies on the NWTC to develop and sponsor courses. The Pacific Northwest Region relies on an annual Wilderness Ranger Workshop.

Coordination between Regions in terms of courses and instructors is limited but growing. Although there is much diversity within the wilderness system there is also much common ground in terms of issues, philosophy, and techniques. Many of the courses offered in Region 1 have applicability in other western regions, and vice versa. Assuming a need for additional wilderness training, should each region develop training as appropriate, or is there an opportunity to develop training courses or modules that can be shared between regions? A cost effective approach is to develop courses or modules that can be shared yet flexible enough to be adapted to local conditions or issues.

RESULTS FROM THE NATIONAL TASK FORCE ON WILDERNESS TRAINING

As an adjunct to the Wilderness Conference held in Minneapolis in 1989, a task force was formed to look at wilderness training needs. The tentative results of this task force led by Lee Carr from Region 2 of the Forest

Service will help provide insight as to how the NWTC may respond to the agency training needs. The recommendations with implications for the NWTC are summarized below:

- There is a role for national training. The present line officers session planned for 1990 serves to give a high level of recognition to the importance of the wilderness management within the Forest Service. It will be a catalyst to engender similar programs at the Regional Level.
- The wilderness training strategy developed by Region 8 is recommended for other regions. It identifies three target groups or levels of training: 1) Awareness, 2) Understanding and Working, 3) Professional level. This strategy is elaborated in the enclosed L.W. Braddock letter of April 17, 1989 to the Forest Supervisors in R-8.
- The Wilderness Correspondence Course being developed by the BLM (Colorado State University) can be an important component in level 2 and 3 training (above). The curriculum being developed can also be used in other methods of training (video, academic classroom, OJT, workshops).
- Several natural resource colleges/universities should be encouraged to establish short-courses (up to 2 weeks) for agency employees (level 3/professional training). With Agency support there should be enough business for 3 or 4 courses in different parts of the country (south, northeast, west).
- There is a role for a National Training Center in wilderness management, like the one being discusses by Region 1 personnel for the Ninemile Center near Missoula (Level 3/professional training). The National line officers training session schedule for 1990 will be a good test for this concept.

- Hands-on field training is essential in the level 2/working training, particularly for hand tool use, low impact camping and travel, transportation system maintenance and construction, and campsite restoration. Different approaches are now being used, ranging from 1/2 day orientation sessions to season-long sessions like the R-5 Trail Shots. Minimum standards (by regions) need to be considered.
- Training materials, including lesson plans and wilderness ranger handbooks, should be made available on a national basis. Basic core materials could be placed in the DG system, then called up to be adapted, modified and used at the Forest level.
- Wilderness is a composite resource with inseparable parts, and the central focus of management must be on the interrelationship of the whole, not on its component parts. Yet, for management, recreation managers have been the "keepers of the wilderness", frequently barring the way for other disciplines to participate in its management. Interdisciplinary planning and management is a must. This will require training wildlife biologists, foresters, engineers, hydrologists, social scientists, range managers and others not only about the principles of wilderness management but about their responsibility toward it's management.
- Establish a national clearinghouse to identify host training units and interested detailers.
- Establish a "certification program" for wilderness managers, based upon experience and/or completion of a training curriculum. For positions with significant wilderness management responsibilities require "certification" as a selection criteria.



Holland Peak in the Bob Marshall Wilderness

A STRATEGIC PLAN FOR THE NINEMILE WILDLANDS TRAINING CENTER

MISSION: Strengthen Forest Service leadership with Wilderness and wildlands management by providing employees with the kind of training they need to ensure they have the necessary knowledge, skills and abilities to manage our wildland resource. Continually focus on the needs of our employees to ensure that we provide the best service possible.

LONG TERM OBJECTIVES:

- Provide training that best meets the needs of target audiences including field crews and wilderness rangers, Forest and District staff, line officers including upper management, and awareness for all employees.

- Develop and transfer state of the art technology to minimize impact to the wilderness and wildland resource. Transfer information to user groups and public through demonstrations and workshops when not in conflict with privately offered training.
- Recruit a cadre of instructors recognized as the best in their respective fields. Pass on skills held by a few to many.
- Construct a new Wildlands Training Center at Ninemile, separate from the existing compound, designed to accommodate training and provide lodging.
- Develop liaisons with and invite participation with other agencies such as the Bureau of Land Management and the National Park Service.
- Recognizing that wilderness funding has been limited, develop cost effective training programs.
- Increase employee awareness and understanding of wilderness values.
- Develop a network between regions and other training centers to share courses, technology and instructors. Serve as a center of excellence with development of courses that can be presented at the NWTC and exported to other locations.
- Develop integrated training that focuses on the interrelationships between management, philosophy and primitives skills. Do not isolate wilderness components in the training process.

Development of the strategic plan must keep in mind the strengths and weaknesses of the internal environment as well as the threats and opportunities posed by the external environment.

STRENGTHS AND OPPORTUNITIES

- ☺ An opportunity exists to develop and implement wilderness training at the National level as outlined by the Wilderness Training Task Force. The NWTC has demonstrated leadership with the formation and successful operation of a Wildlands Training Center. A National Training Center may be appropriate.
- ☺ A highly visible commitment to wilderness training is a positive way to highlight National Forest wilderness management.
- ☺ Training provides an opportunity to impart a strategic thrust to wilderness management; wilderness philosophy, mission, and strategies can be emphasized through training.
- ☺ Opportunities may exist to develop partnerships with interest groups which may lead to financial support for developing new courses and implementing this strategy.
- ☺ The adjacent 5000 acre administrative pasture offers opportunities for wilderness related demonstrations outside of wilderness. For example, actual campsites and trails can be used to demonstrate problems and their solutions.
- ☺ Opportunities to develop partnerships with research and universities exist. Ninemile is strategically located near the Intermountain Research Stations Wilderness Research unit, the Missoula Equipment Development Center, and near the University of Montana and the University of Idaho, two leading wilderness education universities.

- ☺ Ninemile is located in a tranquil setting away from distractions yet only 25 miles away from major services and air transportation. The historic setting and surrounding wildlands creates an excellent atmosphere for wilderness training.
- ☺ The dedication and commitment of many employees to wilderness is a strength. Given the Forest Service rich tradition with wilderness, there is an opportunity to develop and rely on internal leadership for training as well as external sources.
- ☺ Ninemile is surrounded by the largest concentration of wilderness in the lower 48 states. The diversity of wilderness ranges from the vast Bob Marshall and Selway Bitterroot wilderness to small but heavily used Rattlesnake wilderness adjacent to the Missoula urban area. The diversity of the surrounding wilderness provides issues, case studies and conditions likely to be encountered in other regions, thus broadening the scope of training that the NWTC can provide.

BARRIERS AND THREATS

- ☹ The Forest Service is a decentralized and geographically dispersed agency. Creating "standard" courses may be appropriate for some topics but not for others as issues, environment and people differ around the country. Concerns about developing centralized or new systems exist.
- ☹ The strong regional orientation of the Forest Service can create barriers to "National Training Centers". Several regions have programs somewhat similar to Ninemile such as Trail Shots in Region 5 and the Wilderness School held annually in Region 3.
- ☹ Training costs are a significant issue. Training budgets for field crews is limited which constrains their ability to travel great distances. An additional cost is course fees collected to cover the cost

of providing the training. Ninemile could serve as a training center for instructors who in turn could teach courses in their area.

- ☹ Expanding the NWTC beyond its current scope will require a financial and human resource commitment.
- ☹ To fill the wilderness training "vacuum", other organizations may vie for the leadership role in wilderness training. For example, the University of Idaho proposed developing a primitive skills training center in the Frank Church River of No Return Wilderness. The idea was not supported because of the remote location proposed for the training. The Student Conservation Association offers field oriented skills courses for export across the country. The Trailshot program in Region 5 represents an internal effort to improve wilderness training. Several programs can provide leadership concurrently; however, it may be more efficient to coordinate efforts to avoid parallel efforts, duplication, and competition.
- ☹ Facilities to accommodate training at Ninemile are currently limited to one classroom with a capacity for 45 students. Lack of space and overnight facilities limits our ability to grow. (Participants for Advanced Wilderness Management for Line Officers will be staying in a "backcountry" camp above the Ranger Station).

STRATEGIES

As we focus on where we are headed with the NWTC, we need to continually focus on the training needs of the different employees who manage our wilderness and wildland resource. The training curriculum will be developed with the following target audiences in mind:

ALL EMPLOYEES - internal understanding and awareness of wilderness values and management is important for employees who may have occasional or no direct responsibility for wilderness management. Training provides an overview of wilderness values, law, and management.

FIELD CREWS/WILDERNESS RANGERS- these employees spend a good part of the time in the wilderness carrying out work projects, contacting visitors, and collecting data. Primitive skills involving the use of stock, minimum impact camping, trail maintenance and bridge construction are important. As key contacts with wilderness visitors, they must have a good appreciation and understanding of wilderness values and management.

DISTRICT AND FOREST STAFF- these employees typically have direct responsibility for managing wilderness. They prepare and implement management plans, budgets, public involvement and education programs, and visit the wilderness if they get a chance! Courses related to management such as LAC planning, working with outfitter guides, prescribed fire management, information and education programs are important.

LINE OFFICERS- Ultimately responsible for wilderness management, this group typically sets policy and direction for management and allocates resources. A fundamental knowledge and understanding of wilderness is important. This group is responsible for decisions often involving complex issues.

While it is important to keep these target audiences in mind, it's also important to remember the distinction between the groups is often not black and white. For example, many managers have benefited from primitive skills training such as horsemanship and packing. They gain credibility with users and needed skills for when they visit the backcountry. Furthermore, exchange of information and improved understanding between the various groups is essential!

STRATEGY 1

Move aggressively to fulfill a role as a National Training Center for wilderness and wildland skills. This involves developing new courses, expanding course offerings to other regions, and serving as a clearinghouse for wilderness instructors across the nation. This strategy involves seeking partnerships to help finance a full time position dedicated to achieving these goals.

The following actions are recommended to achieve this strategy:

- Establish a position for a two year period for the purpose of developing new courses outlined below and for implementing recommendations in this report. Financing of this person is estimated at \$50,000 per year including travel, course materials, salary, and District expenses. Rely on partnerships or financing from the National level to finance this position.
- Based on the demand for current courses offered and an analysis of future needs, the following curriculum is proposed:

TARGET AUDIENCE	COURSE TITLE	REMARKS
FIELD CREWS AND WILDERNESS RANGERS	EXISTING COURSES Horsemanship and Packing Clinic Minimum Impact Camping Techniques Use and Care of Primitive Tools Trail Bridge Construction Trail Maintenance Techniques Campsite Revegetation Techniques Wilderness Ranger Workshop/Work Skills	Offered by SCA
	PROPOSED NEW COURSES Wilderness Monitoring Techniques Working with Visitors	

TARGET AUDIENCE	COURSE TITLE	REMARKS
DISTRICT AND FOREST STAFF	EXISTING COURSES Working with Outfitters Natural Fire Management Trail Planning LAC/Wilderness Planning	
	PROPOSED NEW COURSES Wilderness Monitoring Designing and Implementing a Wilderness Awareness/Interpretive Program Wilderness and Cultural Resources-Case Studies Wilderness Ecosystem Dynamics Wild and Scenic River Management Managing the "Urban" Wilderness	
LINE OFFICERS	EXISTING COURSES Advanced Wilderness Management for Line Officers	Offer same course to District Rangers
ALL EMPLOYEES	PROPOSED NEW COURSE Wilderness Awareness and Appreciation	

- Increase the "export" of courses with qualified instructors to locations that best meet the needs of students.

A good example is the Horsemanship and Packing course which is now offered in 3 regions.

- Assume a leadership role in developing new courses and develop training materials including lesson plans for use on a National basis. Basic core materials could be adapted and modified for use at the local level. Develop training modules that can be interchanged between courses and various workshops.

- Establish Ninemile as a national clearinghouse for instructors following the concepts of "Masters" developed in Region 6. Instructors will be recruited based on their knowledge of the subject area as well as on their teaching and people skills. A data general library of instructors/skills will be maintained for use by all regions and forests. Seek instructors with the skills necessary to teach the curriculum proposed above.

Develop a list of instructors for each category such as trails, bridges, primitive tools, wilderness education, etc..

- Encourage partnerships with wilderness groups to help finance a position to implement recommendations that have National implications. Involve partners with identification of resource issues and development of programs where appropriate. Develop a partnership prospectus to send to the the various interest groups.

- Develop courses to train instructors from other regions.

- Maintain a national training task force or board of directors to identify priorities and to facilitate coordination between regions.

- Develop a prospectus and architectural drawing for a new training center facility at Ninemile that includes classroom as well as bunkhouse space. Continually take advantage of opportunities to market this concept.

STRATEGY 2

Continue on our current course by expanding our curriculum on an opportunity basis; seek opportunities to host National training courses like Advanced Wilderness Management for Line Officers. Rely on course fees to finance operations and rely on existing organization with some shifts to recognize increasing workloads.

- Evaluate existing workload and add courses if time and resources are available. Select several courses from the list of proposed new courses to add to the curriculum based on review by the board of directors. Explore options for bringing in short term detailers to develop new courses if financing is available.

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- Encourage partnerships with wilderness groups to help finance a position to implement recommendations that have National implications. Involve partners with identification of resource issues and development of programs where appropriate. Develop a partnership prospectus to send to the the various interest groups.

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- Formalize a list of available instructors to teach at Ninemile.
- Continue to export courses on a "demand" basis provided our overhead costs are covered.

OPERATIONAL RECOMMENDATIONS THAT APPLY TO BOTH STRATEGIES

- Continually solicit feedback from students, wilderness staff, and interest groups concerning training needs. Include a survey of potential training needs in course evaluations. (Appendix C).
- Recognizing the fluctuating demand for courses based on their availability and the pool of applicants, rotate some courses so they are offered every second or third year.
- Continue to invite interest groups to training sessions to share ideas and increase understanding of various perspectives.
- Continue to look for opportunities to use training to complete project work so that the cost of the project can help defray training expenses.
- Complete an analysis of operating costs to ensure that fees adequately cover costs. Emphasize the value of centralized contracting for instructors.

- Continue to cover costs of developing and exporting courses by charging appropriate fees.
- Develop demonstration area adjacent to Ninemile to demonstrate minimum impact techniques.
- Video key courses and use film in various training modules for later sessions.

PROMOTION

Marketing involves communicating to others the services available. This involves internal as well as external communications.

- Develop a travelling display to communicate the need for training and the services offered by the Ninemile Wildland Training Center. (Appendix B).
- Develop an annual booklet summarizing information on courses offered for the year and distribute to all Forests and Regions around the country. Complete by September to include in Regional training packages. Target distribution to key wilderness managers. (Appendix D).
- Meet annually with key wilderness groups in the regional training area such as the Bob Marshall and Selway Bitterroot managers, Forest staff officers, and at wilderness meetings to explain program and solicit feedback on existing and proposed courses.
- Tie into wilderness communication networks to ensure information about training center and training opportunities receive wide distribution.

- From a public relations standpoint, encourage articles in magazines such as Sierra Club, Audubon, Wilderness, ...Invite key members of interest groups to training sessions.

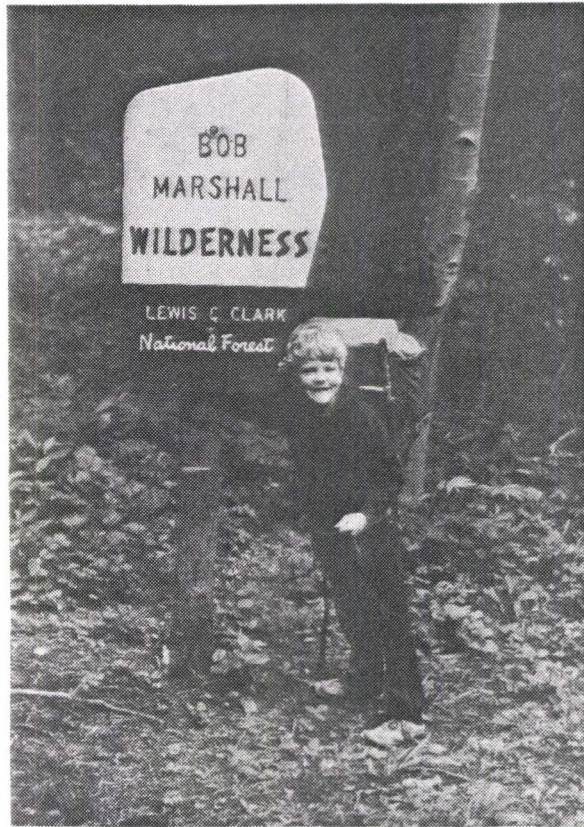
SUMMARY

The heightened interest in wilderness management presents real opportunities for the NWTC. In terms of wilderness training offered around the country, Ninemile appears to be in the lead with developing and offering wildland training courses. The timing appears right for continued expansion of the NWTC. Ninemile has demonstrated its ability to operate a wildlands training center, and for the reasons discussed throughout this report, Ninemile is the logical place to implement the recommendations of the Wilderness Training Task Force as well as recommendations outlined in this report.

The Forest Service has a long and proud wilderness tradition epitomized by individuals like Aldo Leopold, Art Carhart, and Bob Marshall. Although excellent training can be provided by external sources such as universities or other groups, providing leadership with wilderness training will help us continue to be leaders with wilderness management. Tom Peters advice that all training be line driven, consisting of input primarily from line, and taught substantially by line seems particularly appropriate for wilderness.

Ultimately, the success of the program depends on providing a high quality service that meets the needs of our different employees and is responsive to the management needs of our diverse wilderness system. Continued leadership with wilderness management will require a highly skilled and dedicated workforce. Ninemile help fulfill our wilderness management mission as leaders with wilderness related training.

This paper will serve as a catalyst to generate support for achieving the goals and objectives identified in the strategic plan.



**"The richest values of wilderness lie not in the days of Daniel Boone, nor even in the present,
but rather in the future."**

Aldo Leopold

LITERATURE CITED

- Bush, G. 1989. Proclamation for national wilderness week. 1p.
- General Accounting Office. 1989. Wilderness preservation, problems on some National Forests should be addressed. GAO/RCED-89-202. 91p.
- Nash, R. 1988. The United States- why wilderness? For the Conservation of the Earth. World Wilderness Congress (4th:1987): Denver, CO and Estes Park, CO, Fulcrum Inc. 1988. 418 p.
- Overbay, J. 1989. Wilderness tomorrow, taking care of what we have. Managing Americas enduring wilderness resource conference. Minneapolis, MN.
- Peters, T. 1987. Thriving on chaos. Harper and Row Publishers, New York, NY. 708 p.
- Spray, R. and P. Weingart. 1988. The wilderness environment: training wilderness managers. Wilderness Benchmark 1988: Proc. of the National Wilderness Colloquium, Asheville, NC., Southeastern Exp. Sta. (GTR SE-51) 228 p.
- Symes, J. 1987. Recreation in the Forest Service: a marketing opportunity. Dept. of Forestry, Clemson Univ., April 1987.
- Syme, J., G. McClellan, and U. Muzaffer. 1989. Conceptual framework for forest recreation marketing in the public sector. (Draft). Dept. of Forestry, Clemson Univ.
- US House of Representatives, Subcommittee on National Parks and Public Lands of the Committee on Interior and Insular Affairs, Oversight hearing on Forest Service wilderness management. July 26, 1988. Ser. No. 100-63.
- Williams, D. and G. Haas. 1989. National Forest recreation management correspondence study course. J. For. 87(10):38-42.

APPENDIX

- A. Summary of wilderness training courses
- B. Display for Ninemile Wildlands Training Center
- C. Survey to assess training needs
- D. Training Center course catalog

LOCATION	SPON-SOR	YEAR	COURSE	TARGET AUDI-ENCE	TRAIN-ING METHOD	SETTING	SCOPE
R1-Ninemile	Region 1	1990	Trail Drainage and Structures	Fieldcrew	LRC	Rustic	Re-gional
R2-Shoshone	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo. Disp	Front	Re-gional
R2 Shoshone	NWTC	1990	Horsemanship and Packing Clinic	Fieldcrew	Geo Disp	Rustic	Re-gional
R2 Pike San Isabel	Forest	1989	Wilderness Management Workshop	Fieldcrew	Workshop	Rustic	Re-gional
R2 Routt	Forest	1989	Wilderness Management Workshop	Fieldcrew	Workshop	Rustic	Re-gional
R3 Lincoln	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo. Disp	Front	Re-gional
R3	Region 3	1989	Wilderness Management School	Mixed	LRC	Wilder.	Re-gional
R4 Payette	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo Disp.	Front	Re-gional
R4 Toiyabe	Region 4	1990	Trails Workshop	Fieldcrew	Workshop	Rustic	
R5 Central Sierra	Cen. Sie	1989	Wilderness Ranger/Manager Training	Mixed	Workshop	Confer.	Com-plex
R5 Shasta Trinity	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo. Disp	Front	Re-gional
R5 Shasta Trinity	SCA	1990	Site Revegetation Workshop	Fieldcrew	Geo Disp	Front	Re-gional

A SUMMARY OF WILDERNESS TRAINING COURSES

LOCATION	SPON- SOR	YEAR	COURSE	TARGET AUDI- ENCE	TRAIN- ING METHOD	SETTING	SCOPE
R1-Ninemile	Region 1	1990	Prescribed Natural Fire Management	Managers	LRC	Class- room	Nation- al
R1-Ninemile	Region 1	1990	The FS and Oufitters Working Together	Managers	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Horsemanship for Managers	Managers	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Understanding llamas	Mixed	LRC	Rustic	Re- gional
R1-Ninemile	WO	1990	Advanced Wilderness Mgmt for Line Officers	Up. Mgmt.	LRC	Rustic	Nation- al
R1-Ninemile	Region 1	1990	Trail project preparation & contracting	Mixed	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Minimum Impact Grizzly Country Camping	Fieldcrew	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Horsemanship and Packing Clinic	Fieldcrew	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Crosscut saw clinic	Fieldcrew	LRC	Rustic	Re- gional
R1-Ninemile	Region 1	1990	Trail Bridge Construction w/ Handtools	Fieldcrew	LRC	Front	Re- gional

LOCATION	SPON- SOR	YEAR	COURSE	TARGET AUDI- ENCE	TRAIN- ING METHOD	SETTING	SCOPE
R5 Sierra	Sierra	1990	Trailshots-Causeway/Turnpike Const	Fieldcrew	LRC	Wildernes	Re- gional
R5 Sierra	Sierra	1990	Trailshots-Log Stringer Bridge Cons	Fieldcrew	LRC	Wildernes	Re- gional
R5 Zones	Zones	1990	Limits of Acceptable Change	Manager	Workshop	Confer.	Re- gional
R6 Mt Hood	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo Disp.	Front	Re- gional
R6 Olympic	SCA	1990	Wilderness Work Skills	Fieldcrew	Geo Disp.	Front	
R6 Washington	Region	1989	Wilderness Ranger Workshop	Fieldcrew	Workshop	Rustic	Re- gional
R8 Jefferson	SCA	1989	Wilderness Work Skills	Fieldcrew	Geo Disp	Front	Re- gional
R8 Ouachita	SCA	1989	Wilderness Work Skills	Fieldcrew	Geo Disp.	Front	Re- gional
R9 White Mountain	SCA	1989	Wilderness Work Skills	Fieldcrew	Geo. Disp	Front	Re- gional
R9 Hiawatha	SCA	1989	Wilderness Work Skills	Fieldcrew	Geo Disp.	Front	Re- gional
NPS Virginia	SCA	1990	Timber Bridges	Fieldcrew	Geo Disp	Front	Re- gional
NPS Yellowstone	SCA	1990	Wilderness Management School	Mixed	Geo Disp.	Front	Re- gional

LOCATION	SPON- SOR	YEAR	COURSE	TARGET AUDI- ENCE	TRAIN- ING METHOD	SETTING	SCOPE
NPS North Cascades	SCA	1990	Site Revegetaton Workshop	Fieldcrew	Geo Disp	Front	Re- gional
Minneapolis	WO	1989	Managing Americas Enduring Wilderness Re- source: A Conference	Up. Mgmt.	Confer	Conferenc	Nation- al
CSU	WO	1990	Wilderness Mgmt Correspondence Sch.	Managers	Corres.	Home	Nation- al
BLM Las Vegas	BLM	1989	Rec and Wz Resource Managment	Managers	Confer	Conferenc	Nation- al
BLM Ennis, MT	BLM	1989	Limits of Acceptable Change	Managers	Confer	Rustic	Re- gional
BLM Alaska	BLM	1989	Wildland Management Workshop	Managers	Workshop	Conferenc	Re- gional

LEGEND:

TRAINING METHOD: LRC= Learning Resource Center; Geo Disp= Geographic Dispersal; Confer= Conference

SETTING: Rustic refers to ranger stations, old camps, and lodges in a wildland setting.

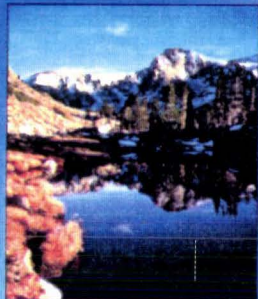
Front refers to camps set up outside wilderness in a backcountry setting. Wilder. refers to training provided in a wilderness setting. Confer. refers to training in a conference room environment.

TARGET AUDIENCE: Refer to text for description of target audiences.



Ninemile Wildlands Training Center

CARING FOR OUR WILDLANDS



With 1 of every 6 National Forest acres designated as wilderness, management of these wildlands is becoming increasingly important.

"We cannot protect these irreplaceable areas simply by leaving them alone. Management is our hope for the future; our hope for leaving wilderness unimpaired for future use and enjoyment."

Jim Overton

Proper training ensures our managers have the unique skills, sensitivity and awareness to care for this precious resource.

ENDURING TRADITIONS FOR AN ENDURING RESOURCE



The historic Ninemile Remount Depot and Ranger Station has long served as a center of excellence for hands-on primitive skills. The new Ninemile Wildlands Training Center carries on this tradition with a curriculum taught by a cadre of instructors recognized as the best in their fields.

TYPES OF COURSES

- Use and Care of Primitive Tools
- Trail Maintenance and Planning
- Outfitter Guide Administration
- Preservation and Maintenance of Historic Structures
- Horsemanship and Packing
- Minimum Impact Techniques
- Knowledge of Liabilities
- Wilderness Management for Line Officers

WILDLAND LEADERSHIP



Our courses focus on traditional "primitive" skills and utilize state-of-the-art technology. We must lead the way with wildland management techniques, such as minimum impact camping and stock use, if we expect others to follow.

Courses designed to increase awareness of the history, philosophy and value of wilderness are planned, as are courses that will help us respond to emerging wildland issues.

"The richest values of wilderness lie not in the days of Daniel Boone, nor even in the present, but rather in the future."

Adelle Leopold



SURVEY FOR TRAINING COURSES

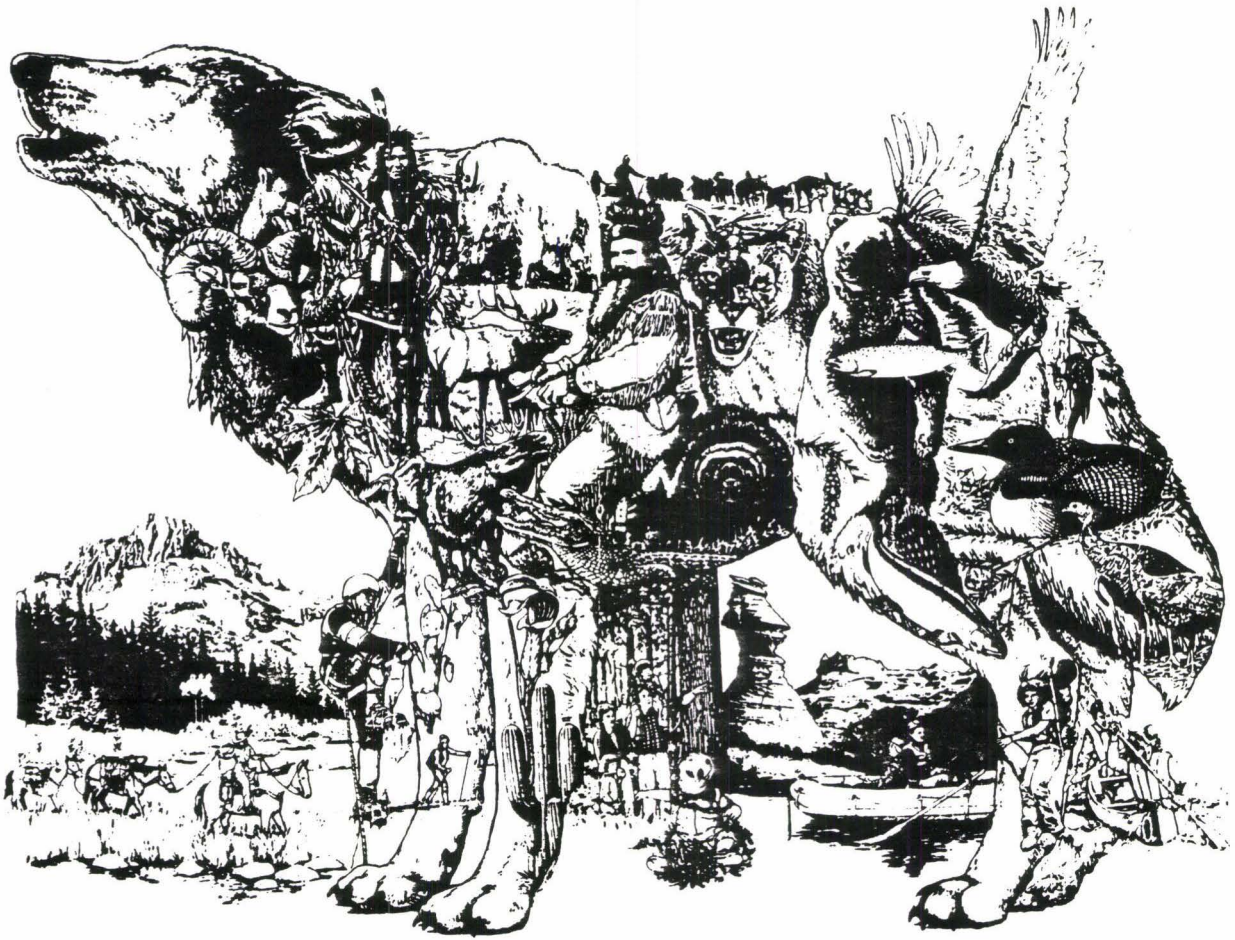
Help us evaluate the need for existing courses and the need for new courses. Please indicate whether there is a high, medium or low need for the courses listed below:

COURSE TITLE	HIGH	MEDIUM	LOW
Horsemanship and Packing Clinic			
Minimum Impact Camping Techniques			
Use and Care of Primitive Tools			
Trail Bridge Construction			
Trail Maintenance Techniques			
Understanding Llamas			
Wilderness Ranger Workshop			
Campsite Revegetation Techniques			
Visitor Management			
Working with Outfitters			
Natural Fire Management			
Trail Planning			
Wilderness Monitoring			
Designing and Implementing a Wilderness Awareness/ Interpretive Program			
Wilderness and Cultural Resources-Case Studies			
Wilderness Ecosystem Dynamics			
LAC/Wilderness Planning			
Wild and Scenic River Management			
Advanced Wilderness Management for Line Officers			
Wilderness Awareness and Appreciation			

REMARKS AND/OR OTHER TRAINING COURSES NEEDED:

YOUR JOB? _____ LOCATION _____

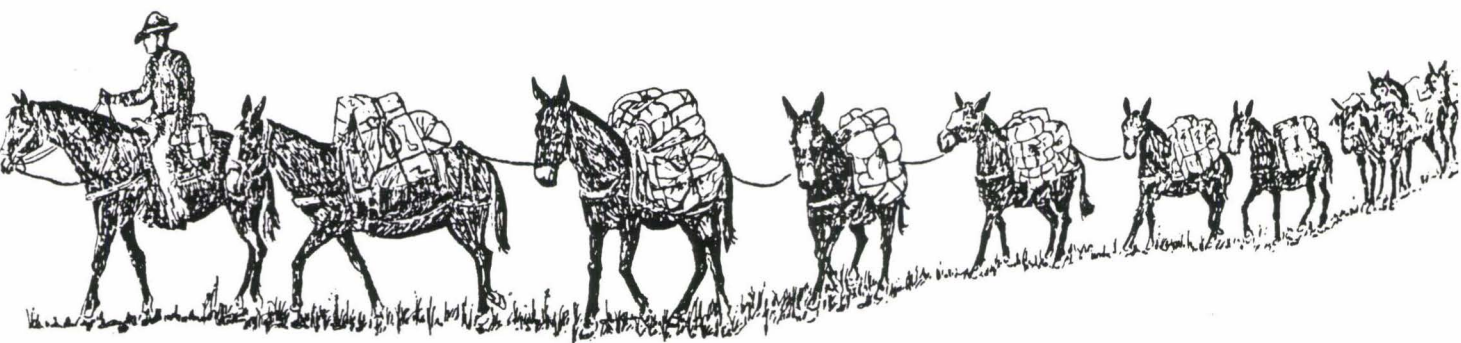
Ninemile Wildlands Training Center



1990 Schedule of Courses



Enduring traditions for an enduring resource.



WHAT IS THE NINEMILE WILDLANDS TRAINING CENTER?

The Ninemile Wildlands Training Center is a Forest Service facility located in west central Montana and headquartered at Ninemile Ranger District, Lolo National Forest. This center offers a curriculum of courses to develop skills in wildland management for agency personnel and others.

WHY WAS THE CENTER LOCATED AT NINEMILE?

The historic Ninemile Ranger Station, originally the Ninemile Remount Depot, has a rich history in training Forest Service personnel in hands-on skills throughout its 60 year history. Originally the Ninemile Remount Depot was developed specifically to provide trained packers and develop standardized techniques used in backcountry work. As mechanization replaced some packstock needs, Ninemile was a training site for early day smokejumpers.

Today, Ninemile is surrounded by rich and diverse wilderness and backcountry areas, with millions of acres of classified Wilderness within short distances of Ninemile. These range from the huge Bob Marshall and Selway Bitterroot complexes to the small Welcome Creek Wilderness and the suburban Rattlesnake Wilderness. All of these pose different management challenges.

Ninemile is away from the busy metropolitan areas, but close to accessible transportation systems. The historic setting of the Station offers an atmosphere of enduring traditions, reflected by the traditional packstock facilities and historic structures that have been adapted in function to meet today's and tomorrow's challenges.

A 5,000 acre wooded semi-primitive Administrative Pasture adjacent to the Ranger Station provides excellent opportunities to create a diversity of backcountry demonstration areas without having to impact our valuable backcountry and Wilderness Areas.

WHO TEACHES AT NINEMILE WILDLANDS TRAINING CENTER?

NWTC is dedicated to transferring skills held by a few individuals to a much larger group of land managers and backcountry workers. To meet this objective, we solicit our instructor cadre based on the reputations they have developed from their peers as the best in their fields. Some of these instructors come from within the Forest Service, but also are drawn from other agencies and from private business. Currently, our curriculum utilizes, in addition to Forest Service wildland experts, historic building preservation and tool expertise from the National Park Service, and well respected outfitters to teach packstock related techniques.

WHAT TYPE OF COURSES ARE OFFERED NOW AND IN THE FUTURE?

Our current curriculum offers 18 courses in such topics as wildland and wilderness management, outfitter and guide administration, preservation of historic structures, management of trails, horsemanship, stock packing, and use and care of primitive tools. A Steering Committee representing all levels of the Forest Service, including Research, provides guidance in new course development, improvement of existing courses, and assists in developing the instructor cadre.

ARE THE COURSES OPEN ONLY TO FOREST SERVICE EMPLOYEES?

At present, Forest Service employees and employees of other land managing agencies at the state and federal level are invited to participate as trainees in all the courses offered.

In the future, we are hopeful that we can provide opportunities for the public to attend some of the courses, or can develop courses designed to meet their needs that are not offered by private sources.

HOW ARE THE COURSES FINANCED?

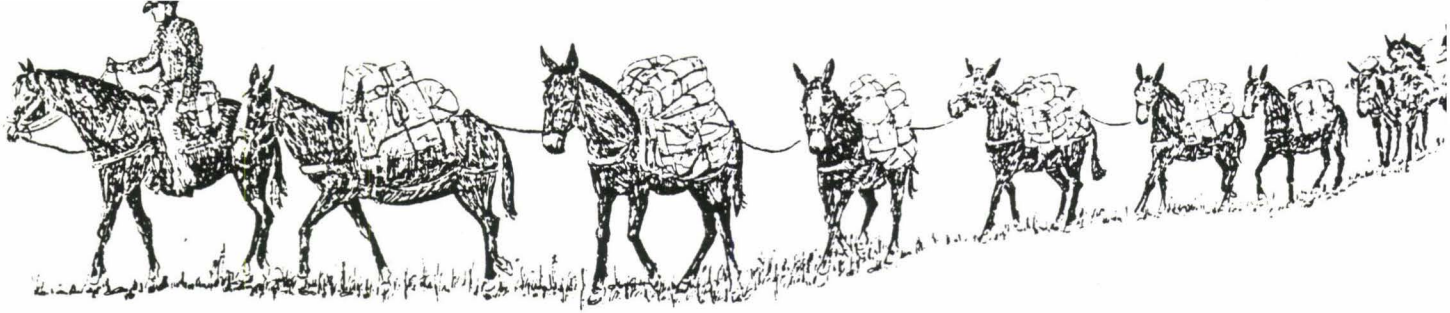
We rely heavily on tuitions charged trainees to cover most of the expenses, but some of the courses costs are paid in part by Forest Service funds appropriated to managing backcountry and wilderness resources, and in some cases cultural resources.

HOW CAN I FIND OUT ABOUT FUTURE COURSES OR ENROLL IN A COURSE NOW OFFERED?

The NWTC Manager is Bob Hoverson. He can be reached via telephone (406) 626-5201 or DG:B. HOVERSON:R01F16D04A. The address of the Ninemile Ranger District is Box 616, Huson, MT 59846. Courses are announced in the Northern Region Training Directory, as well as flyers sent to other Forest Service Units, other agencies, and interested individuals.

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Ninemile Wildlands Training Center

Ninemile Ranger District, Box 616, Huson, MT 59846 406-626-5201

SCHEDULE OF COURSES FOR 1990

1. RECREATION & WILDERNESS

#	COURSE NAME	DATE	NOMIN. DUE	MAX. #	TUITION
1a	Advanced Wilderness Mgmt. for Line Managers	5/7 - 5/11	April 1	50	\$550
1b	Minimum Impact/Grizzly Country Camping	6/11 - 6/13	May 15	30	\$200
1c	The Forest Service & Outfitters - Working Together	3/19 - 3/21	March 1	35	\$75
1d	Prescribed Natural Fire Management	3/27 - 3/29	March 1	32	

2. USE & CARE OF PACK & SADDLE STOCK

#	COURSE NAME	DATE	NOMIN. DUE	MAX. #	TUITION
2a	Horsemanship for Managers	5/31 - 6/1	April 1	15	\$175
2b	Horsemanship & Packing Clinic - Session One	4/16 - 4/20	March 15	25	\$250
2c	Horsemanship & Packing Clinic - Session Two	6/4 - 6/8	May 15	25	\$250
2d	Understanding Llamas	6/13 - 6/15	May 15	15	\$125

When requesting information or submitting nominations for any of the courses, please refer to the course number as well as the course name.

#	COURSE NAME	DATE	NOMIN. DUE	MAX. #	TUITION
3a	Crosscut Saw Maintenance	3/12 - 3/16	March 1	8	\$300
3b	Trail Bridge Construction Using Hand Tools (same course as 5d)	10/15 - 10/19	September 15	8	\$325

4. PRESERVATION & MAINTENANCE OF HISTORIC STRUCTURES

#	COURSE NAME	DATE	NOMIN. DUE	MAX. #	TUITION
4a	Wood Frame Construction - Session One	5/7 - 5/11	April 15	8	\$500
4b	Wood Frame Construction - Session Two	5/14 - 5/18	April 15	8	\$500
4c	Log Structure Stabilization - Session One	9/10 - 9/14	August 15	8	\$500
4d	Log Structure Stabilization - Session Two	9/17 - 9/21	August 15	8	\$500
4e	Log Structure Stabilization - Session Three	9/24 - 9/28	August 15	8	\$500
4f	Window Maintenance and Repair	12/4 - 12/8/89		6	\$500
4g	Sensitivity & Awareness - Eastside (Bozeman)	March - 1-day session - TBA	March 1	50	\$110
4h	Sensitivity & Awareness - Fenn Ranger Station, Idaho	March - 1-day session - TBA	March 1	50	\$110
4i	Historic Structure Assessment	11/28 - 12/1/89		6	\$1080/forest

When requesting information or submitting nominations for any of the courses, please refer to the course number as well as the course name.

5. TRAIL MAINTENANCE & PLANNING

#	COURSE NAME	DATE	NOMIN. DUE	MAX. #	TUITION
5a	Trail Sign Workshop	1/11		40	\$-0-
5b	Trail Project Preparation & Contracting	5/1 - 5/3	April 1	25	\$125
5c	Trail Drainage and Structures	5/22 - 5/24	April 15	40	\$100
5d	Trail Bridge Construc- tion Using Hand Tools (same course as 3b)	10/15 - 10/19	September 15	8	\$325

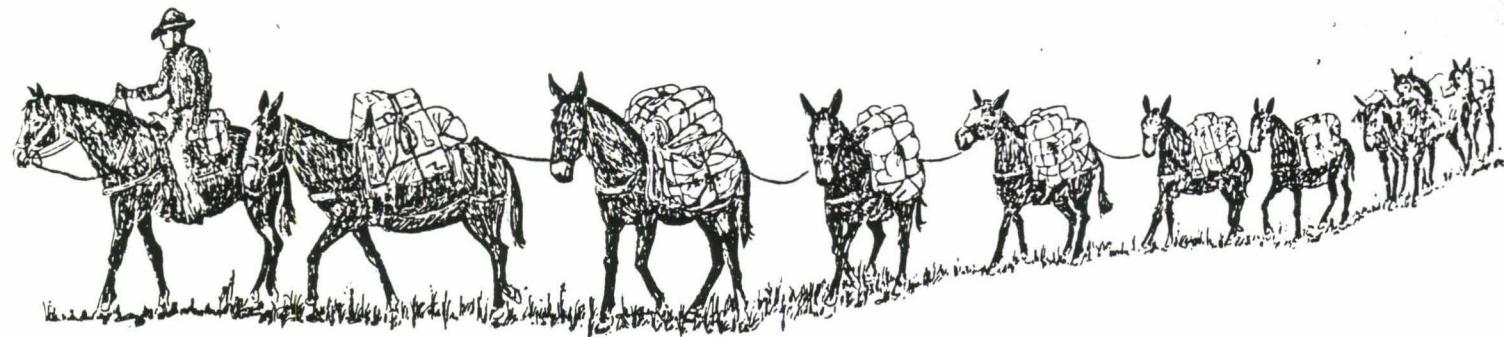
When requesting information or submitting nominations for any of the courses, please refer to the course number as well as the course name.

For more information contact the Receptionist at the Ninemile Ranger Station (406)626-5201 or DG: Mailroom:R01F16D04A

ENROLLMENT: Please submit nominations on a SF-182, or equivalent training nomination form, to Francine Ninneman, Personnel Clerk, Supervisor's Office, Lolo National Forest, Building 24; Fort Missoula, Missoula, Montana 59801 - (406) 329-3789 or FTS 585-3789. **Please include the applicable billing code on your nomination form to ensure proper payment.** The billing codes are: 213748 for Forest Service personnel, 213334 for other Federal personnel, and 213109 for non-government attendees. Please note nomination due date. Cancellations will be accepted until two weeks before the course begins. Substitutions are accepted until the day of the course. Enrollment is limited to number of students listed above.

1. Recreation & Wilderness





Ninemile Wildlands Training Center

COURSE 1a

ADVANCED WILDERNESS MANAGEMENT FOR LINE MANAGERS

May 7-11, 1990

This course is designed for Forest Supervisors, Deputy Forest Supervisors, Regional Staff Directors (all resources), and Deputy Regional Foresters. Sessions will be held on wilderness history and concepts, resource management issues, recreation management, and administration.

LENGTH: 32 hours (Noon on Monday to Noon on Friday)

ENROLLMENT: Please submit nominations on a SF-182, or equivalent training nomination form, to Francine Ninneman, Personnel Clerk, Supervisor's Office, Lolo National Forest, Building 24; Fort Missoula, Missoula, Montana 59801 - (406)329-3789 or FTS 585-3789. **Please include the applicable billing code on your nomination form to ensure proper payment.** The billing codes are: 213748 for Forest Service personnel, 213334 for other Federal personnel, and 213109 for non-government attendees. Nominations are due by April 1. Cancellations will be accepted until two weeks before the course begins. Substitutions are accepted until the day of the course. Enrollment is limited to 50 participants.

COST: There is a tuition charge of \$550 for Forest Service personnel and \$600 for non-Forest Service personnel. Tuition includes lodging and meals in a wilderness setting.

LOCATION AND ACCOMMODATIONS: This training opportunity is held at the historic Ninemile Remount Depot/Ranger Station, Lolo National Forest, Huson, Montana, located 25 miles west of Missoula, Montana. Information on transportation is available on request.

INFORMATION: For further information, please contact Bob Hoverson, Training Coordinator, Ninemile Wildlands Training Center, Box 616, Huson, Montana 59846, phone (406) 626-5201 or DG: B.Hoverson:R01F16D04A.

THE CATALOG INCLUDES A FLIER LIKE
THIS FOR EACH COURSE.